

Figure 1 (page 1 of 3)

SEQ ID NO: 18 -----
 SEQ ID NO: 22 TKTSAFLFTLSRSLNSMTEERNVRKTRV-----
 SEQ ID NO: 20 MGGEAP-----
 SEQ ID NO: 37 M-----
 1 -----
 60

SEQ ID NO: 18 -----
 SEQ ID NO: 22 RRYELDSLTKHVTIALCYTTPARLRRREPHELESKLKGKPRAAMENLIPEDWGGHVT
 SEQ ID NO: 20 RWHRIDALTRKHVTVPFCYAAASP AHLARFPRLESLAVKGKPRAAMYGLIPEDWGAYAR
 SEQ ID NO: 37 RRWFKEIDSETREHVHTMALCYTATPDRLSRRREPNLRSKLKGKPRAAMENLIPENWGGYVT
 61 -----
 120

SEQ ID NO: 18 -----
 SEQ ID NO: 22 PWVKEISQYFDCLKSLHFRRMIVKDSQLQNLLARDRGHVLHALKGKCSGFTTDGLFHIGR
 SEQ ID NO: 20 PWVAELAAPPLECLKAHLHRRMVVTDDDLAALVRARGHMLQELKLKGKCSGFTSTDALRLVAR
 SEQ ID NO: 37 PWVTEISNNLRQLKSVHFRRMIVSDLDLAKARADDLETKLKGKCSGFTTDGLLISIVT
 121 -----
 180

1/6

SEQ ID NO: 18 -----
 SEQ ID NO: 22 FCKSLRVVLFLEESSILEKD-GEWLHELAALNNNTVLETINFYLTIAVVKIEDLIELLAKNCP
 SEQ ID NO: 20 SCRSRLRTLFLEECSSIAADNGT-EWLHDAVNNPVLETLNFMTEL-TVVPADLELLAKKCK
 SEQ ID NO: 37 HCRKIKTILMEESSFSEKD-GKWLHELAQHNTSLEVLFNFYMTFAKISPKDLETIARNCR
 181 -----
 240

Figure 1 (page 2 of 3)

SEQ	ID NO: 18	RLKTLKISECFMPDLVSLFRTAQTLOEFGAGSSEEQGQPVASRNYENYYFPPSLHRLSLL
SEQ	ID NO: 22	NLVSVKLTDCEILDLVNFKHASALEEFCGGTYNE--E---PERYSAAISLPAKLCRGLT
SEQ	ID NO: 20	SLISLKISDCDFSDLIGEFFRMAASLQEFGAGAFIEQGELT---KYGNVKEFPSRLCSLGLT
SEQ	ID NO: 37	SLVSVKVGDFEFILELVGFEEKAANLEEFCGGSLNE--DGMPEKYMNLVEPRKLCRGLS

SEQ	ID	NO: 18	QTCKKLRLVERGDDQGGLEDEQGRISQVGLMIAAQGCPELTYWAIHVSDITNAALEA
SEQ	ID	NO: 22	RCCKRLKRLRIERGDDQG-MEDEEGTVSHRGLIALSQCSELEYMAVYVSDITNASLEH
SEQ	ID	NO: 20	DTCKKLQRLRLVERGDDDPG-LQEQQGGVSQVGLTTAVGCRELEYIAAYVSDITNGALES
SEQ	ID	NO: 37	QYCKQLKRLRIERGADEQG-MEDEEGLVSQRGLLIALAQGCQEELEYMAVYVSDITNESLES

SEQ	ID NO: 18	VGTCSKNLNDFRVLVLLDREAHITELPLDNGVRALLRGCTKLRRFAFYVRPGALSVDVGLGY
SEQ	ID NO: 22	IGTHLKNLCDFRVLVLLDHEEKITDLPLDNGVRALLRGCDKLRRFAYLRRGGLTVDVGLGY
SEQ	ID NO: 20	IGTECKNLCDERVLVLLDREERITDLPLDNGVRALLRGCTKLRRFAYLRPGGLSDTGTGLGY
SEQ	ID NO: 37	IGTYLKNLCDERVLVLLDREERITDLPLDNGVRSLLLIGCKKLRRFAFYLRQQGLTDLGLSY

Figure 1 (page 3 of 3)

Figure 2 (page 1 of 3)

 SEQ ID NO: 30 MPVMAPTASL---LLSPRPLPASRRVPSSPA-----LSASGRRLRARRADTRLRVA
 SEQ ID NO: 32 MALPHSISALATTTLTSSPITKPHKVNPFPFSSNRRNSQFLTKOTPRRSRRRNLSLTPARVA
 SEQ ID NO: 36 -----LVTPR-----LPSLAV-----PLAGGRLR-EGGRSRTRRLRVA
 SEQ ID NO: 38 MRATIPALSL-----LPSLAV-----PLAGGRLR-EGGRSRTRRLRVA
 1 60

 SEQ ID NO: 30 APPSVVPGEAD--QAPGETEPSTSSAD--EKFVWRDHWYPPVSLVVEDLDPSPVTEFQLLN
 SEQ ID NO: 32 APPSTVEADRLLYPEAENNETEEFSDESSSKFTWRDHWYPPVSLIEDLNPLLPTPFQLLGR
 SEQ ID NO: 36 APTSVPGEAE--RAEPEPSTSTSPESSEGEKFVWRDHWYPPVSLVEDLDPRVPTEFQLLN
 SEQ ID NO: 38 APTSVPGEAA--EQAEPESTSAPE-----GEKFSWRDHWYPPVSLVEDLDPSRPTPFQLLN
 61 120

 SEQ ID NO: 30 DLVIWKDPKSGEWAVALDDRCPHRLAPLSEGRIDEGLCQCSYHGWSFDGSGACTRIPQAA
 SEQ ID NO: 32 EIVLWYDKSISQWVAFFDKCPHRLAPLSEGRIDEKGKLCQCSYHGWSFDGCGSCVKIIPQAS
 SEQ ID NO: 36 DLVIWNDPNSGDWVALDDRCPHRLAPLSEGRIDEGLQCSYHGWSFDGSGACTRIPQAA
 SEQ ID NO: 38 DLVIWKEPKSGEWAVALDDRCPHRLAPLSEGRIDEGLCQCSYHGWSFDGSGACTKIPQAM
 121 180

 SEQ ID NO: 30 PEGPEAKAVRSPKACAIKEPTLVSQGLLFVWPDENGWEEKATATKPPMILPREFEDPAFSTV
 SEQ ID NO: 32 SEGPEEARAIGSPKACATREPTLVSQGLLFVWPDENGWEEKATKPPMILPREFEDPAFSTV
 SEQ ID NO: 36 PEGPEEARVSPRACATKEPTLVSQGLLFVWPDENGWEEKATKPPMILPREFEDPAFSTV
 SEQ ID NO: 38 PEGPEEARAVRSPKACAIKEPTLVSQGLLFVWPDENGWEEKATKPPMILPREFEDPAFSTV
 181 240

Figure 2 (page 2 of 3)

***** TIQRLYGYDTLMEVSDPSHIEFAXHKVTGRRDRARPLPKMMESSGAWGYSGSNSGNP
 SEQ ID NO: 30
 SEQ ID NO: 32 NIQRDLFYGYDTLMEVSDPSHIEFAHHKVTGRRDRAKPLPKMDSRGSWGFSGANEGNP
 SEQ ID NO: 36 TIQRLFYGYDTLMEVSDPSHIEFAHHKVTGRRDRAKPLPKMESSGAGNTGNP
 SEQ ID NO: 38 TIQRLFYGYDTLMEVSDPSHIEFAHHKVTGRRDRARPLTRMMESSGAWGYSGANSGNP
 300
 241

* * * RISATEFAPCYALNKEIDTKLPIFGDOKWVIWICSFNIPMAPGKTRSIVCSARNFFQFS
 SEQ ID NO: 30
 SEQ ID NO: 32 QISAKFVAPCYMMNKIEIDTKLPVVGDOQKWWVWICSFNVPMAPGKTRSIVCSARNFFQFS
 SEQ ID NO: 36 RITATEFAPCYALNKEIDTKLPIVGDOKWVIWICSFNIPMAPGKTRSIVCSARNFFQFT
 SEQ ID NO: 38 RITATEFAPCYALNKEIDTKLPIFGDOKWVIWICSFNIPMAPGKTRSIVCSARNFFQFT
 360
 301

* * * * * VPRWYEHWTSNLVYDGDMLVLQGQEKFILSAS
 SEQ ID NO: 30 MPGKAWWQL-----
 SEQ ID NO: 32 VPGPAWWQVNVILLEAFNEFKQCIIHVTQVVPRWYEHWTTSNKVYDGDMLVLQGQEKFILSET
 SEQ ID NO: 36 MPGKAWWQF-----
 SEQ ID NO: 38 MPGKAWWQL-----
 420
 361

* * * * * VPRWYEHWTTSNLVYDGDMLVLQGQEKFILAAT
 SEQ ID NO: 30 KESSADINQQYTKITTFPTQADRFVLAFAWLRKFGNSQPDWFGNPSQEVLPLSTVLSKRE
 SEQ ID NO: 32 KEGG-DINKQYTNITFTPTQADRFVLAFRNWLRHGNGQPEWFGNSSDQPLPLSTVLSKRE
 SEQ ID NO: 36 KESSADVNNQQYTKLTFFPTQADRFVLAFAWLRKFGNSQPDWYGSPSQDALPSTVLSKRE
 SEQ ID NO: 38 KESSTDINQQYTKITTFPTQADRFVLACRTWLRFGNSQPEWFGNPTQEALPSTVLSKRE
 480
 421

Figure 2 (page 3 of 3)

SEQ	ID	NO: 30	MLDRYEQHTLKCSSCKGAYNAFQTLLQKVFMGATVA-----VLLL-----
SEQ	ID	NO: 32	MLDRYEQHTLKCSSCKAAYEGFQTWQKVLMIGATVVFCATSGIPSDFQLRVLLAGLVSA
SEQ	ID	NO: 36	MLDRYEQHTLKCSSCRGAHKAFQTLLQKVFMGATVVFGATSGIPADVQLRILLGAGALVSA
SEQ	ID	NO: 38	MLDRYEQLSLKCSSCKGAYNAFQNLLQKVFMGATVVCCAAGIPDPVQLRLIGAAALVSA

 SEQ ID NO: 30
 SEQ ID NO: 32 AIAFALNQLOQKNFEFVDYVHAEID
 SEQ ID NO: 36 ALAYVEYDRQKHEVFVDYVHADID
 SEQ ID NO: 38 AIIAYAFHELQKNFVFVDYVHADID
541
564